



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,088	02/02/2004	Ken Iizuka	248430US6	6566
22850 7590 04/01/2010 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
TSAL, TSUNG YIN				
ART UNIT		PAPER NUMBER		
2624				
NOTIFICATION DATE		DELIVERY MODE		
04/01/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

1  
2  
3 RECORD OF ORAL HEARING  
4 UNITED STATES PATENT AND TRADEMARK OFFICE  
5

6  
7 BEFORE THE BOARD OF PATENT APPEALS  
8 AND INTERFERENCES  
9

10 *Ex parte* KEN IIZUKA  
11

12 Appeal 2009-011136  
13 Application 10/768,088  
14 Technology Center 2600  
15

16 Oral Hearing Held: March 9, 2010  
17  
18

19 Before CARLA M. KRIVAK, ELENI MANTIS MERCADER, and  
20 CARL W. WHITEHEAD, JR., Administrative Patent Judges.  
21

22 ON BEHALF OF THE APPELLANTS:  
23

24 EDWARD TRACY, JR., ESQ.  
25 Oblon, Spivak, McClelland, Maier and Neustadt, LLP  
26 1940 Duke Street  
27 Alexandria, Virginia 22314  
28

1           The above-entitled matter came on for hearing on Tuesday,  
2   March 9, 2010, commencing at 2:27 p.m., at the U.S. Patent and Trademark  
3   Office, 600 Dulany Street, Alexandria, Virginia, before Jan M. Jablonsky,  
4   Notary Public.

5           JUDGE KRIVAK: Mr. Tracy, do you have a card to give to the  
6   court reporter, please?

7           MR. TRACY, JR.: Let me check. No, sorry. I don't.

8           JUDGE KRIVAK: If you could just spell your name then for  
9   him.

10          MR. TRACY, JR.: Sure.

11          JUDGE KRIVAK: And do you go by Junior?

12          MR. TRACY, JR.: Yes. You can include that if you like.  
13   Good afternoon.

14          JUDGE KRIVAK: Good afternoon. You may start.

15          MR. TRACY, JR.: The main issue is the independent claims  
16   have been rejected as anticipated by the Wendt reference. And certainly  
17   we're going to argue today that the Wendt reference does not teach or  
18   suggest all the features -- well, it doesn't teach all the features within the four  
19   corners of the reference in the detail that's provided in the claim.

20          The Wendt reference solves a different problem than the  
21   claimed invention. The Wendt reference is a detector for a watermark,  
22   where the watermark is a specific kind of watermark as described at, for  
23   example, paragraphs 39 and 40 of Wendt, of the publication. And they  
24   pre-select a watermark that has two portions. One is a portion that can be  
25   easily recognized and the other portion has data in it. And because they  
26   already know what the -- sort of, the portion to be recognized looks like, the

1 process of Wendt, which is, I think, described best in paragraphs 49 and 50,  
2 is they look for the first recognizable portion, determine correction  
3 information based on -- for that portion by comparing that first portion with  
4 something that's in memory. And then they read the second portion using  
5 that information that they get.

6 JUDGE KRIVAK: Okay.

7 MR. TRACY, JR.: So it's a simpler process than the claimed  
8 invention. The claimed invention is intended to be used much more broadly,  
9 trying to recognize images such as fingerprints, as described in the  
10 specification.

11 JUDGE KRIVAK: Okay.

12 MR. TRACY, JR.: And then -- and so what the invention does  
13 is it first -- it has a first and a second image. Then it performs a Fourier  
14 transform and a log-polar coordinate transform on both, and based on that it  
15 generates correction information. It then corrects the first image based on  
16 that information and compares the corrected first image to the second image  
17 to determine if they match.

18 JUDGE WHITEHEAD, JR.: So your second image would be  
19 like the original image --

20 MR. TRACY, JR.: Right --

21 JUDGE WHITEHEAD, JR.: -- that you're trying to correct the  
22 first image to.

23 MR. TRACY, JR.: Right. Or the first image could be a  
24 fingerprint that the police have found, and the second images could be  
25 fingerprints in a database to be compared against. So it's not necessarily

1 directly related the way that Wendt knows basically ahead of time what  
2 should be there.

3 JUDGE WHITEHEAD, JR.: Okay.

4 JUDGE KRIVAK: What is the correction information, or  
5 what do you -- you say that the first image and second image -- you're  
6 performing a Fourier transform and log-polar transform to the first and  
7 second image, and generating correction information of the first image. Is  
8 that true? Do you actually prefer -- perform a Fourier transform and  
9 log-polar on both images?

10 MR. TRACY, JR.: Yes.

11 JUDGE KRIVAK: Okay.

12 MR. TRACY, JR.: And that correction information is  
13 based -- well, will allow you to, for example, shrink or expand the first  
14 image to be -- to sort of match what the second image is. For example, if the  
15 fingerprints actually match, but the first image, the fingerprint you found is  
16 smaller and rotated, you need to make that correction or it won't match the  
17 second one.

18 JUDGE KRIVAK: Okay.

19 MR. TRACY, JR.: And --

20 JUDGE MANTIS MERCADER: And why do you perform a  
21 Fourier transform and log-polar coordinate transform on both of them? Is it  
22 sort of like to standardize them, or why do you perform on both the first and  
23 the second?

24 MR. TRACY, JR.: Well, for example, the -- assuming that they  
25 actually match, but the first image is a fingerprint that is rotated and shrunk.  
26 You need the information from the second image to know that it's actually

1 rotated and shrunk. By doing it on both you can generate this correction  
2 information that will in some ways make the first one as much as possible  
3 like the second one.

4 JUDGE KRIVAK: So you are. You're standardizing it, more  
5 or less. Or yeah, getting it -- okay.

6 MR. TRACY, JR.: And then you correct the first image based  
7 on that information and then you can compare them.

8 JUDGE KRIVAK: Okay.

9 MR. TRACY, JR.: Again, what Wendt does is it takes a  
10 portion of the first image. It recognizes that because it knows ahead of time  
11 what should be there. Then he uses that information to correct the second  
12 image, although it's really just reading the second image. It's just taking the  
13 data of the second image, which -- for example, it says it could be "Do not  
14 copy." Now at times the outstanding actions have been a little bit  
15 inconsistent as to what's the first image, what's the second image, what's the  
16 correction information. I think the only way that you could possibly -- the  
17 only possible correction information is when you take their first image,  
18 compare it to what's saved and you get some information that is used to read  
19 the second image.

20 However, if you consider that the correction information, there  
21 is no corrected first image. Once that -- what the Examiner is calling the  
22 first image, the easily recognizable portion of their watermark is compared  
23 to what's stored in memory, it's not used again. It's not corrected and then  
24 compared to any other image. By the same token, the information that  
25 you're trying to read, which the Examiner referred to as the second image,

1 you get the information from the original comparison, but then you just read  
2 it. You don't make a corrected image out of the --

3 JUDGE KRIVAK: You get the image from the -- could you  
4 just repeat what you just said?

5 MR. TRACY, JR.: You take the information that you got from  
6 comparing the first image to the stored image and then you simply use that  
7 to read out the second image. You don't create a corrected second image.  
8 You don't again do any comparison. So --

9 JUDGE MANTIS MERCADER: But don't you need to  
10 standardize somehow so you can compare it to the standard, like the  
11 watermark to a standard or to a reference? So by doing that, aren't you  
12 correcting the watermark? Aren't you rotating it in order to be able to  
13 compare it?

14 MR. TRACY, JR.: Well, you know, the watermark again is  
15 sort of two portions. You take the first portion and compare it to memory  
16 and get whatever the adjustment needs to be made. Then with the second  
17 portion, you're using that to just read the information out of the second  
18 portion.

19 JUDGE MANTIS MERCADER: Right. I'm talking about the  
20 first portion.

21 MR. TRACY, JR.: Okay.

22 JUDGE MANTIS MERCADER: Isn't the first portion similar  
23 to what you're doing, in that you're trying to match it up? The watermark is  
24 trying to be, you know, compared to whatever it's -- the standard or  
25 something. So isn't that by itself similar to what you're doing?

1 MR. TRACY, JR.: Well, at times the Examiner has tried to say  
2 that that's sort of the -- maybe the correlation. However, what we're  
3 correlating is a corrected first image with the second image. So that initial  
4 comparison -- there is only one comparison in Wendt. At that time there is  
5 no correction information. So certainly neither image can be considered a  
6 corrected first image. They do that single comparison, determine the  
7 differences and use that to read out the second image.

8 JUDGE MANTIS MERCADER: So they do not adapt it in  
9 terms of size or rotation in Wendt.

10 MR. TRACY, JR.: They may do that. But again, once they  
11 figure out the rotation and sizing, they just use that to read out the second  
12 image.

13 JUDGE KRIVAK: So you're saying even if it is corrected, it's  
14 not used to -- to what, match?

15 MR. TRACY, JR.: It's not used in any comparison.

16 JUDGE KRIVAK: It's not comparing anything. Okay.

17 MR. TRACY, JR.: Because the second image is information  
18 that you don't know.

19 JUDGE KRIVAK: And by comparing, you mean matching, in  
20 your claim?

21 MR. TRACY, JR.: Right. The last part -- determining if the  
22 corrected first image matches the second image based on the results of the  
23 correlation processing.

24 JUDGE KRIVAK: Oh. You do have comparison. Performing  
25 correlation comparison.



1 MR. TRACY, JR.: Right -- performing correlation comparison  
2 between the corrected first image and the second image. Then determining  
3 if they match.

4 JUDGE KRIVAK: Okay.

5 MR. TRACY, JR.: So essentially I don't think if you hold that  
6 the -- well, if you're trying to interpret that the first comparison is  
7 the -- performing a correlation comparison, that doesn't work because neither  
8 image is a corrected image based on correction information. If you try and  
9 say that the result of that only comparison is the correction information, you  
10 don't then correct anything and compare it to any other image. So again,  
11 Wendt is just too simple to really be compared to the present invention, and  
12 the reason is in some ways Wendt is starting with these particular  
13 watermarks that are, sort of, more predictable than the general images that  
14 the present invention is trying to match, for example, like a fingerprint.

15 JUDGE KRIVAK: Okay. Are you finished, or did you have  
16 more to say?

17 MR. TRACY, JR.: No. That's -- I think that's all the issues.  
18 And again, it certainly doesn't teach each of those elements in as great a  
19 detail as he has claimed in Wendt.

20 JUDGE KRIVAK: Okay. Let me just -- okay. And nothing to  
21 say about the secondary reference, then? All right --

22 MR. TRACY, JR.: Well, the -- that was applied to the  
23 dependent claims and we feel that the independent claims are patentable.

24 JUDGE KRIVAK: Yeah. Yes. All right. I don't have any  
25 more questions. Do you? No?

26 JUDGE WHITEHEAD, JR.: I'm good.

1 JUDGE KRIVAK: All right. Well, thank you very much.  
2 Whereupon, at 2:38 p.m., the proceedings were concluded.  
3  
4